

CLAIMS

1. A decorative material comprising at least a substrate, a low-luster pattern ink layer partially formed on the substrate, and a surface protective layer which is present on and contacted with the low-luster pattern ink layer so as to cover a whole surface including both a region where the low-luster pattern ink layer is formed and a region where no low-luster pattern ink layer is formed, wherein the surface protective layer is formed by crosslinking and curing an ionizing radiation-curable resin composition, and provided therein with a low-gloss region which is located in a portion just above the low-luster pattern ink layer and in the vicinity of the portion, and visually recognized as a concave portion.

2. A decorative material comprising at least a substrate, a low-luster pattern ink layer partially formed on the substrate, and a surface protective layer which is present on and contacted with the low-luster pattern ink layer so as to cover a whole surface including both a region where the low-luster pattern ink layer is formed and a region where no low-luster pattern ink layer is formed, wherein the surface protective layer is formed by crosslinking and curing an ionizing radiation-curable resin composition, and a low-luster pattern ink forming the low-luster pattern ink layer contains a non-crosslinked urethane resin as a binder and the ionizing radiation-curable resin composition contains a (meth)acrylate monomer.

3. The decorative material according to claim 2, wherein the low-luster pattern ink forming the low-luster pattern ink layer contains the non-crosslinked urethane resin and an unsaturated polyester resin as a binder.

4. The decorative material according to claim 2 or 3, wherein the ionizing radiation-curable resin composition contains a (meth)acrylate

monomer solely.

5 5. The decorative material according to any one of claims 1 to 4, wherein the low-luster pattern ink forming the low-luster pattern ink layer has an uneven thickness.

10 6. The decorative material according to claim 5, wherein the low-luster pattern ink layer has a thick film region having a relatively large thickness and a thin film region having a relatively small thickness, and a portion just above and in the vicinity of the thick film region is the low-gloss region having a relatively low gloss, whereas a portion just above and in the vicinity of the thin film region is the low-gloss region having a relatively high gloss.

15 7. The decorative material according to any one of claims 1 to 6, wherein the surface protective layer contains fine particles, and an average particle size of the fine particles is close to a plus-side value of a maximum thickness of the surface protective layer located just above the low-luster pattern ink layer.

20 8. The decorative material according to claim 7, wherein a coefficient of variation (CV value) of a particle size distribution of the fine particles which is represented by the formula: [(standard deviation of particle size/average particle size) x 100] is 30% or lower.

25 9. The decorative material according to claim 7 or 8, wherein the fine particles satisfy a relationship represented by the following formula (I):

$$1.05 \times t_M \leq d_A \leq t_G \quad (I)$$

wherein d_A is an average particle size of the fine particles; t_M is a maximum thickness of the surface protective layer located just above the low-luster pattern ink layer; and t_G is a thickness of the surface protective layer located

in a region where no low-luster pattern ink layer is formed.

10. The decorative material according to any one of claims 7 to 9,
wherein the surface protective layer contains the fine particles in an amount of
5 2 to 20% by mass.

11. The decorative material according to any one of claims 1 to 10,
wherein the surface protective layer is formed by crosslinking and curing the
ionizing radiation-curable resin composition containing an
10 ethyleneoxide-modified polymerizable compound, and contains particles of
baked kaolin.

12. The decorative material according to any one of claims 1 to 11,
wherein the low-luster pattern ink forming the low-luster pattern ink layer
15 contains an extender pigment.

13. The decorative material according to any one of claims 1 to 12,
wherein the ionizing radiation-curable resin composition is an electron
beam-curable resin composition.

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14. The decorative material according to any one of claims 1 and 5 to 13,
wherein a surface of the surface protective layer located above the low-gloss
region has a convex shape.

25 15. The decorative material according to any one of claims 1 to 14,
further comprising a penetration-preventing layer formed between the
substrate and the low-luster pattern ink layer.

16. The decorative material according to claim 15, wherein the substrate

is a penetrable substrate.

17. The decorative material according to any one of claims 1 to 16,
wherein a colored layer, a pattern layer and the penetration-preventing layer
5 are successively laminated on the substrate, and the low-luster pattern ink
layer as well as the surface protective layer which is present on and contacted
with the low-luster pattern ink layer so as to cover a whole surface including
both a region where the low-luster pattern ink layer is formed and a region
where no low-luster pattern ink layer is formed, are successively formed on the
10 laminated layers.

18. The decorative material according to claim 17, wherein the pattern
layer has a woodgrain pattern, and the low-luster pattern ink layer forms a
low gloss region corresponding to a vessel portion of the woodgrain pattern .

15 19. A decorative plate comprising a substrate plate and the decorative
material as defined in any one of claims 1 to 18 which is attached onto the
substrate plate.